

ABSTRACT

**[0078]** A composite material comprising a first layer which comprises a surfactant component, surfactant-generated microcells, a gel catalyst component and a binder component, and a second layer which comprises a metallic component is provided. The first layer may further comprise a filler component. In addition, the composite material may further comprise a substrate to which the first layer is adhered. The composite materials have heat insulating and fire resistant characteristics and are particularly suited for use in building materials and mattresses.